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(54) Title: TOMATO SPOTTED WILT VIRUS

(57) Abstract

The nucleotide sequences for tomato spotted wilt virus (TSWV) nucleocapsid is described, and transgenic plants containing the nucleocapsid nucleotide sequence from a TSMV isolate is shown to provide resistance in the transgenic plant to *Tospoviruses* from different serogroups. In addition, transgenic plants containing the nucleocapsid nucleotide sequence from a lettuce isolate of TSWV were produced and shown to provide (in plants producing small amounts of the nucleocapsid protein) resistance in the transgenic plant to both homologous and closely related viral isolates whereas plants producing larger amounts of the nucleocapsid protein possessed moderate levels of protection against both the homologous isolate and isolates of distantly related Impatiens necrotic spot virus (INSV).